

CLAIMS:

1. A data communication method for operation between remote data processing systems, the method comprising the step of transmitting data between the systems via
5 a communications channel having an associated path, characterised in that the method comprises the further steps of: -

receiving a session initiation stimulus at a Session Control System(SCS);
10 authenticating the received initiation stimulus in the SCS by referencing the stimulus source and stimulus content to a requested service;
generating a proceed signal to a multiservices provider on receipt of an authentication valid signal from a contract database associated with the SCS
15 and generating a service event.

2. A data communication method as claimed in claim 1 incorporating means for performing the additional steps of: -

20 generating a timestamp to indicate session commencement
generating and passing a service vector signal to the network;
transmitting a connection end destination address to the network
25 receiving a connection established signal from the network to indicate connection to a content server;
receiving a content vector from the content server the content vector
30 indicating the type of content and a flag for identifying the existence of a service component related to content; and

receiving a grade of service of multipath vector from the network to indicate the nature of the multi-party service for the purposes of billing if the service includes a multipath component.

- 5 3. A data communication method as claimed in claim 1 incorporating the further steps of: -

detecting the generated service event;

- 10 triggering of a service by a service user associated with the service event,

initializing setup of the triggered service using a traffic part of a service vector associated with the service event by a service gateway;

- 15 monitoring use of the service by the service user;

application of a tariff part of the service vector and timestamped service usage information from the service gateway for creating a charge record.

- 20 4. A data communication method as claimed in claim 1 incorporating the further steps of: -

receiving from the network a signal to indicate that the path has been modified; and

- 25 automatically generating a timestamp associated with the modification.

5. A data communication method as claimed in claim 1 having means for:-

- 30 receiving a session termination stimulus at the Session Control System (SCS); and

generating of timestamp to indicate session termination in response to the received stimulus.

- 5 6. A data communications method as claimed in claim 5 wherein the received stimulus trigger generation of a session detail record (SDR) and the generation of a charge record.
7. A data communications method as claimed in claim 6 wherein the SDR is linked to a label of multi-protocol label switching (MPLS).
- 10 8. A data communications method as claimed in claim 1 incorporating the step of passing the label to a customer protocol stack of a customer system.
- 15 9. A data communications method as claimed in claim 1 using a service vector based incorporating naming information, descriptive information and network or content resource information.
- 20 10. A data communications method as claimed in claim 1 using a content resource vector incorporating a name, a type, coding techniques and value categories of still images and moving images.
11. A data communications method as claimed in claim 10 wherein the resource vector includes traffic control device parameters and flow rates.
- 25 12. A data communications method for processing data generated for traffic engineering purposes by accessing functionality or data produced through a traffic engineering applications programming interface and delivering traffic engineering data over an external data interface.